



Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

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March 19, 2009

Also Sent Via E-mail

Tom McCue, Environmental Manager
Siltronic Corporation
7200 NW Front Avenue
Portland, OR 97210

**Re: Request to Modify Quarterly Groundwater Monitoring Program
Siltronic Corporation
Portland, Oregon
ECSI No. 183**

Dear Mr. McCue:

The Oregon Department of Environmental Quality (DEQ) reviewed the "Proposed Reduction in Quarterly Monitoring Program Scope – Siltronic Corporation" dated February 13, 2009 (Monitoring Proposal). Maul Foster & Alongi, Inc. prepared the Monitoring Proposal for the Siltronic Corporation (Siltronic). The Monitoring Proposal provides recommendations, including supporting information and data, for reducing the number of monitoring wells being sampled by Siltronic on a quarterly basis.

Quarterly groundwater monitoring has been conducted by Siltronic since October 2003 to evaluate the nature and extent of contamination by trichloroethene, including its degradation products and additives (collectively referred to as volatile organic compounds [VOCs] in this letter), associated with releases from the former solvent underground storage tank system (Former UST System). With implementation of the Revised EIB Source Control Work Plan¹, the primary objective of groundwater monitoring is to evaluate the performance and effectiveness of treating VOCs in the Former UST System vicinity using enhanced in-situ bioremediation (EIB). Performance monitoring wells (PMWs) located immediately upgradient, downgradient, and beneath the Fab 1 building have been located and constructed for this purpose.

The Monitoring Proposal recommends removing certain monitoring wells from the quarterly monitoring program based on historic data indicating the installations are outside the lateral and/or vertical extent of the plume of VOCs. In addition, Siltronic indicates the installations can be replaced by PMWs recently installed to monitor the progress of treating groundwater with EIB.

Based on our review of the Monitoring Proposal, DEQ approves:

- Removing monitoring wells WS-10-27, WS-16-125, WS-16-161, WS-17-52, and WS-17-94 from the quarterly groundwater monitoring program; and
- Reducing the sampling frequency at WS-11-161, WS-12-161, WS-14-161, and WS-15-140 from quarterly to semi-annually.

¹ Maul Foster & Alongi, Inc., 2008, "Revised Enhanced In-Situ Bioremediation Source Control Work Plan," October 20, a work plan prepared for Siltronic Corporation.

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DEQ considers continued monitoring at the installations listed in the second bulleted item to be necessary for maintaining groundwater data at wells that delineate the vertical extent of VOC contamination. Based on VOC trends for the shallow monitoring wells in the cluster, semi-annual sampling should be conducted at these deep installations when concentrations are at seasonal maximums and minimums.

Siltronic should be aware that NW Natural is currently preparing a groundwater monitoring plan for 2009. As you know, NW Natural coordinates sampling at certain monitoring wells installed by Siltronic to assess the nature and extent of groundwater contamination on the Siltronic property associated with the former Gasco manufactured gas plant. DEQ anticipates the monitoring wells referenced above will remain available to NW Natural for this purpose.

In addition to the monitoring wells referenced in the Monitoring Proposal, monitoring data indicate the groundwater chemistry at monitoring wells WS-11-125, WS-20-112, and WS-22-112 is controlled by the EIB treatment combination injected during the Pilot Study². DEQ understands these installations are being monitored to assess the influence of EIB on groundwater chemistry over time. For Siltronic's information, given the locations of these installations relative to the pilot treatment area and to each other, DEQ would consider the data collection objective to be met by monitoring WS-11-125 only.

Please call me at (503) 229-5543 if you have questions regarding this letter.

Sincerely,

Dana Bayuk, Project Manager
NWR Cleanup Section

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Henning Larsen, DEQ/SRS
ECSI No. 183 File
ECSI No. 84 File

² Maul Foster & Alongi, Inc., 2007, "Enhanced In-Situ Bioremediation Pilot Study Report," August 9, a report prepared for Siltronic Corporation.